

## USE OF THE DOT EMERGENCY RESPONSE GUIDEBOOK (ERG) FOR RESPONSE TO HAZARDOUS MATERIAL RELEASE EVENTS AT BURIAL SITES

**QUESTION:** Could the DOT Emergency Response Guidebook (ERG) Guide Number 111 (Mixed Load/Unidentified Cargo) provide a reasonable basis for initial response to actual or potential release events involving unknown hazardous materials being unearthed during burial site remediation?

**ANSWER:** Following the process outlined in DOE O 151.1C, hazards in burial sites need to be identified and characterized to the extent possible, subjected to the screening process, and, if necessary, analyzed in an EPHA to provide the technical basis for emergency response. However, if an actual or potential release (dispersal) of an *unknown* (unidentified) hazard occurs at the site during burial remediation activities (i.e., without benefit of identification and characterization through the Order process), then there will be no hazard-specific response tool to *immediately* determine classification and protective actions.

In many respects, an actual or potential dispersal event involving unknown waste at a burial site would be similar to a transportation accident involving an unknown and possibly hazardous cargo. A set of initial response measures generally regarded as adequate for the transportation case (i.e., ERG #111) could therefore serve as a reasonable starting point for *immediate* response to release events involving unknown hazards at a burial site.

The recommendations of ERG #111 can provide Emergency Action Levels (EALs) for emergency classification and be used to initiate protective actions (following the approach discussed in the response to the FAQ - *Classification of Onsite Transportation Accidents*) for unidentified hazards until the hazard can be characterized and the need for EPHA analysis determined. Other specific ERG Guides may apply for *types* of materials that are expected to be unearthed in specific burial grounds (for example, #161 for low level radioactive material). However, if both the type and the likely form and quantity (e.g., container size and radionuclide inventory) of material in a burial ground can be determined, then hazard-specific EPHA calculations should be performed prior to unearthing activities to produce appropriate EALs and initial protective actions.

It is essential that a fixed timeframe be established for conducting the screening and analysis, and/or an activity milestone (external to DOE O 151.1C requirements) be designated that places limits on the applicability of the ERG-based response practices. For example, if material is placed in a container for transport to a treatment or disposal facility, the transition from the burial site's ERG-based response practices to a planning/preparedness program under a Site Transportation EPHA or other fixed-facility EPHA

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**Program Elements: Categorization and Classification; Protective Actions and Re-entry; Hazards Survey/Hazards Assessment (Technical Planning Basis)**

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should be clearly defined. The goal is to achieve compliance with DOE O 151.1C requirements as soon as practicable, using the ERG-based approach only until the Hazards Survey and EPHA requirements for the material are met and EALs and initial protective actions are developed, or the material otherwise comes under the coverage of an existing facility- or activity-specific EPHA.